

REMARKS

Claims 1-30 are pending in the application.

Claims 1-7, 9-10, 12-20, 22-23 and 25-26 were rejected.

Claims 8, 11, 21 and 24 were objected to.

Claims 27-30 were allowed.

Claims 1, 3-6, 13-14 and 16-19 are amended herein.

I. Objections To Drawings

Figures 1 and 4 of the drawings were objected to under 35 CFR 1.84(p)(5) because of various identified informalities. Proposed replacement drawing sheets for those figures, with the identified problems corrected, are provided in the Attachment. It is noted that a misspelling of the term “Ingress” in block 50 of Figure 4 has also been corrected. With the corrections made to Figures 1 and 4, Applicants believe that the basis for the objection has been met and overcome. Withdrawal of the objection is respectfully requested.

II. Objection To Specification

The specification was objected to because of various identified informalities. The specification has been amended to correct the identified problems. As so amended, the basis for this objection is believed to have been met and overcome. Withdrawal of the objection is respectfully requested.

III. Claim Objections

Dependent claim 13 was objected to as being dependent on itself. That claim has been amended to depend from independent claim 1. Withdrawal of the objection is respectfully requested.

IV. 35 USC §103 Claim Rejections

In the Office Action, claims 1,2, 6, 7, 10, 12, 14 15, 19, 20, 23, 25 and 26 were rejected under 35 USC §103(a) as being unpatentable over Simons *et al.* (U.S. Patent No. 6,332,198) in view of Grenier (U.S. Patent No. 6,741,553). Applicants respectfully traverse this rejection and request reconsideration by the Examiner.

The invention here is directed to a methodology for switching from a primary communications path to a protection path with no loss of data during the switching operation. In particular, the inventive methodology is directed to packet based communications systems having redundant switching cores which are interfaced with a plurality of ingress and egress traffic flow controllers. According to the methodology of the invention, a need is identified for switching one or more data flows from a primary switching core to a redundant secondary switching core of the packet communications system. To carry out that switching operation without data loss, an ingress flow controller operates to effect a temporary interruption in its traffic flow, and to signal that interruption to an egress flow controller in the same traffic path. Included in that signaling message is an indication of the alternative traffic flow path to which the egress controller is to begin receiving traffic. After a short interval, essentially determined in respect to the time needed by the egress controller to switch to the alternate path, the ingress controller operates to restart the traffic flow, via the secondary switching core, and concurrently sends a signal to the egress controller that it should start receiving traffic via the alternative flow path. For an illustrative embodiment of the invention, the traffic interruption signal is sent via a special test cell to from the ingress to the egress controller, and is denominated as an End OF Flow (EOF) indicator. Similarly, the traffic restart signal for that

illustrative embodiment is transmitted from the ingress to the egress controller in a special test cell and is denominated as a Start OF Flow (SOF) indicator.

Independent claims 1 and 14 (the only rejected independent claims) were rejected as being unpatentable over Simons in view of Grenier. While the primary reference, Simons, provides a general teaching in respect to protection switching for packet based systems, it plainly does not show or suggest the particular methodology of the invention for providing loss free protection switching, as was recognized by the Office Action. The secondary reference, Grenier, is asserted to provide the missing elements of the claimed invention and that combination is asserted to be obvious to a skilled artisan. Applicant respectfully suggests that the construction given Grenier as teaching missing elements of the claimed invention cannot be sustained.

Each of independent claims 1 and 14 includes a limitation directed to “waiting a given time to cease receipt of packets from said one switching core,” which the Office Action acknowledges is not taught by Simons, but asserts that such a limitation is taught by Grenier. Grenier is directed to the transmission of an alarm signal to a selector node, which node arguably represents an analog to the egress controller of Applicants’ methodology, in case of a failure detected in a primary communications path, where the function of the alarm signal is to cause the selector node to switch to a protection path for receipt of traffic. The particular thrust of Grenier is the use of a high priority channel for the transmission of the alarm signal, to enable the selector node to switch to the protection mode at an earlier point than it might have been able to do so had the alarm signal been sent via a normal traffic channel. While the Office Action asserts that operation of the selector node according to the teaching of Grenier corresponds to the “waiting a given time” limitation of Applicants’ claims, the Applicants

respectfully submit that nothing in the teaching of Grenier can reasonably be construed as effecting any such a waiting period. Indeed, by arranging for a faster receipt by the selector node of the alarm signal, and thus effecting a faster switchover to the protection path by that node, Grenier actually teaches away from the methodology of the invention here.

While Applicants believe that their invention is clearly distinct from the teaching of Simons and Grenier, or any combination thereof, they have nonetheless determined to amend independent claims 1 and 14 to emphasize the distinctiveness described herein. Applicants therefore respectfully submit that independent claims 1 and 14, as amended herein, are patentably distinct from the teaching of Simons/Grenier, and request withdrawal of the §103 rejection of those independent claims. All of the remaining rejected claims depend, either directly or indirectly, from one of those patentable independent claims, and thus also should be patentable.

V. Allowed and Allowable Subject Matter

Claims 27-30 were indicated as being allowed, and are re-presented here without change. Dependent claims 8, 11, 21 and 24 were objected to as being dependent on a rejected base claim, but were indicated as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Applicants thank the Examiner for providing this indication of allowed and allowable claims.

With respect of allowable dependent claims 8, 11, 21 and 24, Applicants believe that amended independent claims 1 and 14, which serve as the base claims for these allowable dependent claims, are also allowable over the art of record, for the reasons indicated above. Accordingly, the Applicants have determined not to present any new independent claims directed to those allowable dependent claims at this time.

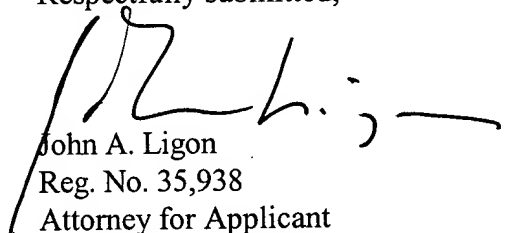
VI. Conclusion

Having fully addressed the Examiner's objections and rejections herein, it is believed that, in view of the preceding amendments and remarks, this application now stands in condition for allowance. Such allowance is respectfully requested.

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Please charge any fees due in respect to this amendment to Deposit Account No. 50-1944.

Respectfully submitted,



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Dated: March 7, 2005

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I hereby certify that this Response to Office Action is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313 on March 7, 2005.

By: 

John A. Ligon